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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/576,472  | 04/20/2006  | Tatsuo Matsuoka      | 289997US2PCT        | 7211             |
| 22850 7590 11/20/2009<br>OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.<br>1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |             |                      |                     |                  |
| EXAMINER  |             |                      |                     |                  |
| CHAN, KAWING  |             |                      |                     |                  |
| ART UNIT  |             | PAPER NUMBER         |                     |                  |
| 2837  |             |                      |                     |                  |
| NOTIFICATION DATE   |             | DELIVERY MODE        |                     |                  |
| 11/20/2009  |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/576,472

**Applicant(s)**

MATSUOKA, TATSUO

**Examiner**

Kawing Chan

**Art Unit**

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/23/09 has been entered.

Claims 1-14 are pending for examination.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US 2002/0175651 A1) in view of Angst (WO

03/004397) (all the rejections below are based on Angst et al. US 7,117,979 B2, the equivalent translation of Angst WO 03/004397) and Vialonga (US 6,357,553 B1).

In Re claims 1 and 7, Kaneko discloses an elevator apparatus (Figure 2) comprising:

- an elevator control apparatus having an operation control portion (3) that controls a movement of a car (401), and an actual speed of the car, based on a current operation mode (normal operation) (Paragraph [0023]), and
- wherein when the supervising portion (7) performs an initial setting (initial position setting operation) to set a relationship between a signal from a supervision position sensor (6) and a position of the car in an initial operation mode (i.e. obtain position information between actual position of the car and the position of the car with respect to a fixed point) (Figure 8: 701; Paragraphs [0045, 0046]);
- the operation control portion causes the actual speed of the car to be a low speed (Paragraph [0046]: "a mobile body slowly travels..." implies the speed of the car is slower than normal),
- the operation control portion causes the actual speed of the car to be a high speed greater than the slow speed (since the car is moving slowly in initial setting, the speed of the car is faster in normal operation compared to the speed of the car in initial setting).

Kaneko fails to disclose the supervising portion detects abnormalities in the movement of the car, and it also fails to disclose the operation control portion controls the movement of the car to a floor writing start position.

However, with reference to Figure 1A), Angst discloses a supervising portion (24) that detects abnormalities (overspeed) in the movement of the car (Col 4 lines 45-48). Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Kaneko with the teachings of Angst, since it is known in the art to utilize a monitoring device to detect the speed of an elevator so as to be able to apply braking force to the elevator in an overspeed condition.

Kaneko and Angst fail to disclose the operation control portion controls the movement of the car to a floor writing start position.

However, Vialonga discloses the operation control portion controls the movement of the car to a floor writing start position (first mode: requesting the cab moving to any particular landing; and second mode: moving the cab up or down depending the needs) (Col 2 lines 7-45). Since Kaneko teaches the initial setting operation starts either at the top or bottom of an elevator shaft (fix point), it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Kaneko with the teachings of Vialonga so as to be able to move the elevator to any desire fix point for performing operation (e.g. inspection).

In Re claims 2 and 8, with reference to Figures 6 and 9, Angst teaches the supervising portion (24.1 & 24.2) outputs a permission signal (when speed below the

speed limit value graph) to the operation control portion regarding the actual speed of the car to be controlled by the operation control portion (Col 4 lines 15-26 & Col 7 lines 34-46).

In Re claims 3 and 9, Angst discloses a plurality of operation modes of an elevator (i.e. ramping operation, inspection, error mode, etc), and different speed limit value graphs will be produced dependent on the operation mode (Col 2 line 66 to Col 3 line 14 & Col 5 line 47 to Col 6 line 9). Therefore, Angst inherently discloses the operation control portion of the elevator can selectively change the current operation mode between a plurality of operation modes.

In Re claims 4 and 10, with reference to Figures 8 and 9, Angst teaches the supervising portion (24) comprises an emergency terminal speed-limiting device (24.2) configured to forcibly decelerate and stop the car when the car approaches a vicinity of a terminal landing at a speed higher (46-48) than a preset speed (29) (Col 7 line 28 to Col 8 line 3).

In Re claims 6 and 12, with reference to Figure 9, Angst further discloses a control position sensor (21) and a supervision position sensor (21) connected to the supervising portion (24.2) for detecting a position of the car (8) within a hoistway (Col 8 lines 14-17). Also, as we have discussed above, Kaneko discloses the relationship between the signal from the position sensor and the position of the car within the hoistway is set in the initial setting performed by the supervision portion (i.e. relationship between the actual position of the car and the position of the car with respect to a fixed point).

In Re claims 13 and 14, Angst teaches speed limit value graphs (28) which are stored in the speed monitoring device (24), and the limit values are set to be higher than normal rated speed (27) of the car at each position in the travel way (Figure 3) so that the supervision portion is configured to detect the abnormalities based on the limit values with respect to the position of the car (e.g. overspeed condition). As we have discussed above, Kaneko teaches the relationship set between the supervision position sensor (6) and the position of the car (position with respect to a fix point) in the initial setting (initial position setting operation). When the elevator runs in normal operation, the elevator system determines the position of the car based upon the set relationship and thus determines the abnormalities of the car (e.g. overspeed condition).

Since Angst teaches the speed limit value graphs used to detect abnormalities of the elevator are based on the speed of the car and the car position, it would have been obvious to one having ordinary skill in the art to use data collected from the initial setting (disclosed by Kaneko) to set the speed limit (disclosed by Angst) for the elevator at each position of travel way during normal operation with reasonable expectation of success.

4. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (US 2002/0175651 A1) in view of Angst (WO 03/004397) (all the rejections below are based on Angst et al. US 7,117,979 B2, the equivalent translation of Angst WO 03/004397) and Vialonga (US 6,357,553 B1) as applied to claims 1 and 7 above, and further in view of Mueller (US 2004/0079591 A1).

In Re claims 5 and 11, Kaneko, Angst and Vialonga have been discussed above, but they fail to disclose the shortened buffer and the control portion causes the car to travel at a speed equal to or lower than a permissible collision speed of the shortened buffer.

However, with reference to Figures 1 and 4, Mueller discloses the use of reduced nominal speed (RG) in the end area of the shaft would enable the installation of a shortened buffer (smaller shaft pit and shaft head) (Paragraph [0011]), and wherein the operation control portion (2) causes the car to travel at a speed equal to or lower than a permissible collision speed of the shortened buffer (with the use of the reduced nominal speed RG at each shaft end) in performing initial setting of the supervising portion (monitored by the safety device) (Paragraph [0073]).

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to have modified the teachings of Kaneko, Angst and Vialonga with the teachings of Mueller, since it is known in the art to utilize reduced speed limit at the shaft end so that smaller buffers will be needed (Paragraph [0011]).

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.



***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Deplazes et al. (WO03/008316) and Deplazes et al. (US 7,201,256 B2) are further cited to show related teachings in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kawing Chan whose telephone number is (571)270-3909. The examiner can normally be reached on Mon-Fri 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Benson can be reached on 571-272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. C./  
Examiner, Art Unit 2837

/Walter Benson/  
Supervisory Patent Examiner, Art Unit 2837